

RESTORATION AND ENHANCEMENT PROJECT PROPOSAL

The Tacoma School District was identified as the potentially liable party in an oil spill from an underground tank next to the Administration Building located at 601 South 8th Street, Tacoma, WA, in January of 1995. This incident, as a result of excessive rainfall, resulted in fifty gallons of oil entering the stormdrain system and being deposited into the Thea Foss Waterway. The RDA Committee and the Department of Ecology investigated the extent to which public resources were damaged, the possibility of injury to public resources and the quantification thereof if found. Based upon their findings and conclusions, the Tacoma School District is eligible to develop a restoration/enhancement project in lieu of monetary damages calculated from the compensation schedule authorized under State law.

The Tacoma School District proposes to develop and implement an educational program which will provide a specific focus upon stormwater and urban runoff. This program will be implemented in the same geographic area which deposits stormwater runoff to the Thea Foss waterway as that effected by the contamination of January, 1995 (see attached map).

Educational programs and/or activities which focus upon stormwater, urban runoff, water pollution or oil spills have not been offered within the Tacoma School District. This program is an opportunity to develop an interactive teaching and learning theme between students and their neighborhood. The primary focus of the program will be prevention of additional stormwater pollution with a special emphasis on petroleum contamination. We believe the results of this program will prevent at least fifty gallons of oil from entering the Thea Foss Waterway.

The project will engage a classroom of sixth grade students at Jason Lee Middle School in an integrated program of study using the urban watershed as a theme through which the disciplines of math, science, social studies and language arts are woven. The program will include:

1. Exploration of the marine components of the Thea Foss waterway. Students will review aerial photographs of the Thea Foss Waterway and its adjoining watershed to inventory

the elements which comprise the marine ecosystem. Field trips to the waterway on land and water to experience the natural and man-made elements will be taken. Individuals from the Department of Ecology, the Pierce County Stream Team, and the Commencement Bay Clean-up Action Committee will be involved in this part of the program through technical expertise, technical information and leadership during field trips.

2. Long term measurement and analysis of stormwater runoff. At least monthly and during peak runoff, samples will be collected from the stormdrains. Water volume will be calculated and, to the extent possible, an analysis of chemical components will be made. These activities will be done in cooperation with the Tacoma Sewer Utility.

3. Studies on the effects of oil dumping and runoff on the stormwater system. Information from the Tacoma Sewer Utility, Seattle Metro, the Coast Guard, the Department of Ecology and other sources will provide information to the students and teachers on the effects of human activities on marine habitats.

4. Neighborhood surveys of oil dumping behaviors. Students will discuss and identify possible sources of stormwater contamination in their neighborhood. A map of the stormdrain system will be made from Tacoma Sewer Utility information. The students will design and conduct visual surveys and interviews with people to determine current behaviors, attitudes and public knowledge of pollution prevention behaviors.

5. Development of a community education program to prevent further contamination. Based upon the information collected from their survey, from their water sample analyses, and from educational information on stormwater contamination, the students will design and implement one or more presentations to community groups about the value of the Thea Foss Waterway, the problems of stormwater contamination and recommendations for pollution prevention. Possible groups include the Neighborhood Council, the school Parent Teacher Association, and other identified groups of neighborhood residents. Other possible action activities include flyers to households, marking stormdrains, and/or talking with local business owners.

This project meets the four goals of the Washington State Guidelines for Environmental Education: knowledge of the components of the environment; an understanding of the value and benefits of the environment to the economic and emotional well-being of the community; the development of personal decision making to solve environmental problems; and actions taken to prevent or mitigate environmental degradation.

This educational program will provide future benefit to the Thea Foss Waterway by preventing oil from automobiles and other nonpoint sources from entering the stormdrain system, thereby preventing further degradation of that marine environment. This program will be available to other middle schools for replication within the Tacoma area. Many stormdrains empty into the Thea Foss Waterway from other areas of the city, so the total impact to the waterway would be multiplied by the community education efforts of students. The Thea Foss Waterway Maritime Center will be developing marine education opportunities for students and would welcome this integrated program to support their educational efforts.

The Tacoma School District is willing to compile this program as a notebook of activities and guidelines for replication in other urban settings. We regret the conditions which precipitated this enhancement program, yet welcome the opportunity to contribute not only to the future improvement of this important waterway, but the possibility of helping students become more conscientious citizens in the years to come.